Allotment Assessment and Evaluation Report for
New Mexico Standards and Guidelines for Public Land Health
Canyon Chata (#763) – July 6, 2010

Permittee/Lessee		Authorization Number 3022914		
Livestock Use	Preference AUMs	Allotment 00763	Active 36	Suspended 0
	Period of Use / Kind of livestock	Allotment Canyon Chata	Number/Kind 24	Season of Use 6/1-7/15
	Percent Public Land	AUMs are authorized at 100% public land		
Allotment Profile	Physical Description	Allotment 763 is located approximately 14.5 miles west of Wagon Mound in Mora County, New Mexico. Canyon Chata Allotment is comprised of two parcels. 40 acres lies on the north side of Canyon Chata and 80 acres on the south side. The allotment is largely covered by juniper trees with warm season grasses in the interspaces. The elevation ranges from 5900 to 6100 feet. Three soil types are identified within the BLM parcels. Soils within the parcels are: Crews-Tricon association, undulating. These soils consist of silt loams, with rooting depths 8 to 40 inches. Parent materials of mixed material derived from sandstone and shale comprise these soils. Average annual precipitation ranges between 14 and 18 inches. Hazards for erosion are moderate. Vegetation is characterized by blue grama, sideoats grama, little bluestem, New Mexico feathergrass, western wheatgrass, pinyon and juniper. Sombordoro-Rock outcrop-Tuloso complex, moderately sloping. These soils consist of very stoney sandy loams, with rooting depths between 6 to 19 inches. Parent materials of mixed material derived from sandstone and shale comprise these soils. Average annual precipitation ranges between 14 and 18 inches. Hazards for erosion are moderate to hight. Vegetation is characterized by pinyon, juniper, blue grama, oak, sideoats grama, green needlegrass, pinyon ricegrass and little bluestem. Sombordoro-Rock outcrop-Tuloso complex, very steep. These soils consist of very stoney sandy loams, with rooting depths between 6 to 19 inches. Parent materials of mixed material derived from sandstone and shale comprise these soils. Average annual precipitation ranges between 14 and 18 inches. Hazards for erosion are moderate to hight. Vegetation is characterized by pinyon, juniper, blue grama, oak, sideoats		

<table>
<tr><td></td><td></td><td>grama, and little bluestem.</td></tr>
<tr><td></td><td>Land Status
Acreage</td><td><u>BLM</u> <u>State</u> <u>Private</u>
120 0 0</td></tr>
<tr><td></td><td>Management Objectives</td><td>The allotment is under a ‘Custodial’ (‘C’) management category. ‘C’ category allotments have evidence of a “not apparent” to “upward” long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.</td></tr>
<tr><td></td><td>Key Forage Species</td><td>Blue grama, western wheatgrass, sideoats grama, little bluestem</td></tr>
<tr><td></td><td>Grazing System</td><td>Seasonal use during summer</td></tr>
<tr><td>Current Conditions / Management</td><td>Actual Use</td><td>Actual use reports were not submitted. Use was determined by billed AUMs.
<table><tr><th>AUMs</th><th>Year</th></tr><tr><td>36</td><td>2010</td></tr><tr><td>36</td><td>2009</td></tr><tr><td>36</td><td>2008</td></tr><tr><td>36</td><td>2007</td></tr><tr><td>36</td><td>2006</td></tr><tr><td>36</td><td>2005</td></tr><tr><td>36</td><td>2004</td></tr><tr><td>36</td><td>2003</td></tr><tr><td>36</td><td>2002</td></tr><tr><td>36</td><td>2001</td></tr><tr><td>36</td><td>2000</td></tr></table></td></tr>
<tr><td></td><td>Utilization</td><td>Due to the lack of staff, utilization studies have not been conducted. During the assessment visit it was determined that the allotment was receiving slight to moderate utilization.</td></tr>
<tr><td></td><td>Climate</td><td>The past water year (Oct. 1, 2009 – Sept. 30, 2010) the average temperature has been slightly below average (0 to 1 degrees Fahrenheit) and precipitation below average (3 to 6 inches). The winter was slightly drier (0 to 1.5 inches) and was colder (5 to 6 degrees Fahrenheit). The spring was drier (0 to 0.75 inches) and was colder (0 to 1 degrees Fahrenheit). This should provide below average plant growth for cool season plants. The summer precipitation was below average (1.5 to 3 inches) and slightly warmer (2 to 3 degrees Fahrenheit) which should provide below normal growth for warm season plants.

Global climate change resulting from increasing atmospheric CO_2 levels may accelerate rates of plant extinction and result in shifts in ecosystem structure (species diversity) and function. We anticipate that our monitoring efforts will track vegetation shifts allowing for management modifications to address local range impacts resulting from global climate change.</td></tr>
<tr><td></td><td>Trend</td><td>In 2010 monitoring transects and photo points were placed in the allotment to establish vegetation trend. The full findings are kept in the allotment file at the Taos Field Office, but are summarized below.</td></tr>
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<tr><td>PLOT #1</td><td>2010</td></tr>
<tr><td>Ground Cover</td><td>(%)</td></tr>
<tr><td>bare ground</td><td>59</td></tr>
<tr><td>criptogams</td><td>0</td></tr>
<tr><td>gravel</td><td>0</td></tr>
<tr><td>rock</td><td>0</td></tr>
<tr><td>litter</td><td>24</td></tr>
<tr><td>BOGR (Blue Grama)</td><td>14</td></tr>
<tr><td>ARPU (Purple Threeawn)</td><td>1</td></tr>
<tr><td>GUSA (Snakeweed)</td><td>1</td></tr>
<tr><td>BODA (Buffalo Grass)</td><td>2</td></tr>
<tr><td>Species Composition</td><td>(%)</td></tr>
<tr><td>MUTO (Ring Muhly)</td><td>2</td></tr>
<tr><td>BOGR (Blue Grama)</td><td>73</td></tr>
<tr><td>GUSA (Snakeweed)</td><td>10</td></tr>
<tr><td>ARPU (Purple Threeawn)</td><td>1</td></tr>
<tr><td>BODA (Buffalo Grass)</td><td>6</td></tr>
<tr><td>JUMO (Juniper)</td><td>7</td></tr>
<tr><td>OPPO (Pricklypear)</td><td>1</td></tr>
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</td></tr>
<tr><td></td><td>Riparian</td><td>There are no riparian areas within this allotment.</td></tr>
<tr><td></td><td>Wildlife</td><td>Seasonal home ranges in the allotment include those for deer, elk, bear, bobcat, fox, coyote, small mammals and reptiles, bats, raptors, turkey vulture, songbirds, and a variety of insects.

Some dietary overlap occurs between wildlife and cattle; however, best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.

This allotment has potential for future projects to enhance wildlife habitat through vegetation treatments and water developments.</td></tr>
<tr><td></td><td>Threatened and Endangered Species</td><td>It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.

Special status species that are likely to be found on the allotment (seasonally) include bald eagle and ferruginous hawk.</td></tr>
<tr><td>Findings / Rationale for the New Mexico Standards for Public Land Health</td><td></td><td>A Rangeland Health Evaluation Matrix was completed on July 6, 2010. This evaluation matrix is from Technical Reference 1734-6 “Interpreting Indicators of Rangeland Health.” The actual matrix forms are available within the allotment file.</td></tr>
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		Below is a summation of the information gathered by the on site evaluation. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description. Soil and Site Stability Six indicators were deemed None to Slight, four were deemed Slight to Moderate, zero were deemed Moderate, zero were deemed Moderate to Extreme, and zero were deemed Extreme to Total. Rating: 92% Hydrologic Function Seven indicators were deemed None to Slight, three were deemed Slight to Moderate, zero were deemed Moderate, zero were deemed Moderate to Extreme, and zero were deemed Extreme to Total. Rating: 94% Biotic Integrity Seven indicators were deemed None to Slight, two were deemed Slight to Moderate, zero were deemed Moderate, zero were deemed Moderate to Extreme, and zero were deemed Extreme to Total. Rating: 96% Overall Rating: 94%
	Upland Standard	*Upland ecological sites are in productive and sustainable condition within the capability of the site. Upland soils are stabilized and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The kind, amount and/or pattern of vegetation provides protection on a given site to minimize erosion and assist in meeting Sate and Tribal water quality standards.* This allotment is meeting the Upland Standard based on the above evaluation and information. Soils appear stable and erosion is no more than expected for the site. Early summer precipitation promoted excellent ground cover by warm season grasses.
	Biotic Communities	*Ecological processes such as hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status , threatened, and endangered species appropriate to site and*

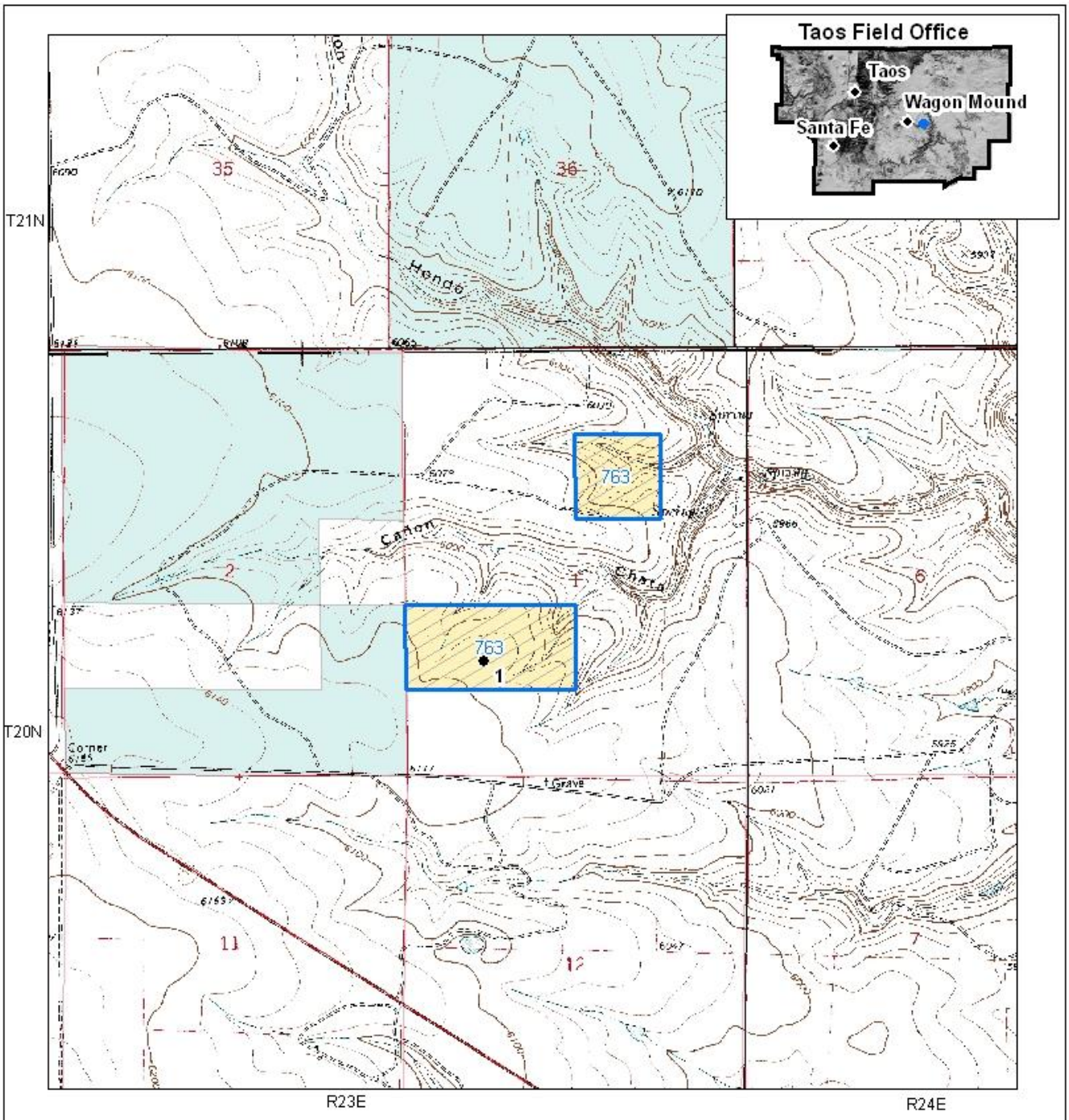
	Standard	*species.* This allotment is meeting the Biotic Communities Standard based on the above evaluation and information. Plant communities' are healthy, but vegetation treatments maybe necessary because of juniper encroachment. Snakeweed (Gutierrezia sarothrae) is also very prominent.
	Riparian Standard	*Riparian areas are in a productive, properly functioning and sustainable condition, within the capability of that site.* The Riparian Standard does not apply to this allotment. No riparian area or vegetation is located within the allotment boundaries.
Conclusion		The New Mexico Standards for public land health are being met; therefore no Determination Document is warranted. Continued monitoring will help establish future trend. It is recommended that the grazing lease be renewed for another ten years.

Consultation and Coordination

This Assessment and Evaluation Report has been sent or given to the affected permitee(s) / lessee(s), the interested publics and the following interdisciplinary team members for input and review:

Merril Dicks – Archeologist
Scott Draney – Department of Game and Fish
Greg Gustina – Fish Biologist
Pam Herrera-Olivas – Wildlife Biologist
Tami Torres – Outdoor Recreation Planner
Jacob Young – Rangeland Management Specialist
Paul Williams – Archeologist
Valerie Williams – Wildlife Biologist

This document was prepared by: Derek Trauntvein – Rangeland Management Specialist



Canyon Chata (763)

0 0.125 0.25 0.5 0.75 1 Miles

Legend

- Monitoring Plots
- Allotment Boundary
- Bureau of Land Management
- State
- Private

7.5' Topos: Canon Las Cuevas and Canon Colorado

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Friday January 7, 2011